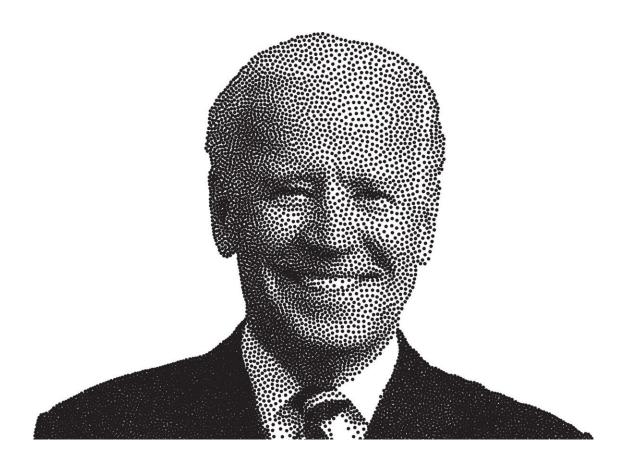


Is Joe Biden experiencing cognitive decline? Here's why we shouldn't speculate

July 17 2024, by Lyndsey Collins-Praino



Credit: Pixabay/CC0 Public Domain

As the United States presidential election race gathers pace, current president Joe Biden's advanced age continues to draw significant scrutiny.



But <u>either candidate</u> would reach the record for the oldest sitting US president over the course of their four-year term. While Biden is currently 81 years old, former US president Donald Trump, at 78, is only three years younger.

A <u>February poll</u> found 59% of Americans believe both candidates are too old for another presidential term. A further 27% thought President Biden was too old, but not former President Trump.

Criticism of Biden increased following the first US presidential debate in late June. Concerns were raised about his <u>performance</u>, including his soft, muffled speech, and his tendency to make illogical points or trail off.

More recently, during a press conference at the NATO summit, Biden made several verbal errors, including referring to Ukrainian President Volodymyr Zelensky as <u>President Putin</u> and to US Vice President Kamala Harris as <u>Vice President Trump</u>.

Many people, including <u>medical experts</u>, have speculated that President Biden is showing classic features of neurodegeneration, including <u>cognitive decline</u>. But to what degree is cognitive decline a normal part of aging? And what can we really tell about Biden's cognitive state from public appearances alone?

Cognitive changes are a part of aging

While it's true that cognitive function changes with normal aging, not all aspects of cognition are affected to the same extent, and not all changes are negative.

Some <u>domains of cognitive function</u> show age-related decline, particularly those reliant on "fluid" abilities. Fluid abilities require



individuals to pay attention to their environment and quickly process information to solve problems. These skills show steady decline from around age 20.

This can lead to changes in areas including:

- memory
- executive function (for example, the ability to plan, multitask and exhibit self-control)
- language
- attention
- perceptual-motor control (the ability to coordinate between what we perceive with our senses and resulting actions).

Nevertheless, while older adults may take longer processing new information or switching between tasks, they often still do so correctly. Similarly, while older adults may find recalling past information (for example, struggling to remember someone's name when you meet them unexpectedly) or memorizing new information (such as the weekly grocery list) challenging, these changes don't usually significantly impact day-to-day function.

There are also <u>memory aids and strategies</u> that can compensate for these changes and reduce their effects. These might include keeping a to-do list, using tricks to remember new information, or setting reminders. As such, age-related <u>cognitive changes</u> alone don't necessarily impact a person's ability to perform a particular job.

Certain aspects of cognitive function actually improve with age, in particular, "crystallized" abilities. These rely on the cumulative skills and knowledge gained throughout a person's life, such as general knowledge or vocabulary. These <u>improve up to one's 60s</u> and then plateau to around age 80.



Similarly, older adults tend to <u>manage conflict better</u>, using strategies that allow for compromise, emphasizing the value of multiple perspectives and recognizing knowledge limits.

Progression to dementia

A subset of <u>older adults</u> (<u>around 12%–18%</u>) develop <u>mild cognitive</u> <u>impairment</u>, where cognitive decline becomes pronounced enough to be noticed by family and friends, and may begin to have some impact on daily function.

People with <u>mild cognitive impairment</u> might forget things more often, lose their train of thought, struggle with decision making or experience changes in their judgment.

While some people with mild cognitive impairment remain stable or even improve, 10%–15% go on to develop dementia each year, with cognitive impairment progressively becoming severe enough to significantly impact on daily function and lead to changes in behavior and personality.

Cognitive function can vary

A range of factors, including genetic, environmental and lifestyle factors, influence variations in cognitive function.

While some of these factors (such as genetics) cannot be modified, others can be. For example, in a study that followed people <u>for eight</u> <u>years</u>, physical inactivity, smoking and alcohol consumption were associated with increased cognitive decline. Increased cognitive decline relative to normal age-related changes can make it difficult for people to carry out everyday tasks, such as remembering to pay bills, attend



appointments or take medications.

On the flip side, addressing these factors could offer some <u>protection</u> <u>against cognitive decline</u>.

There are also short-term influences to consider. After the debate, Biden's team argued he was <u>unwell and had jet lag</u>.

Evidence shows multiple factors can negatively affect the relationship between age and cognitive function. These include jet lag, viral infection, stress or even poor sleep, which may all be relevant in the current case.

So sometimes, episodes that might look like cognitive decline can actually be temporary, due to these external factors.

What about Biden?

While President Biden has shown some difficulties with speech and memory in recent appearances, this doesn't necessarily mean he's experiencing cognitive decline.

Much of the speculation regarding Biden's cognitive state has been based on people watching video footage of the president. But it's crucial to stress that a person's cognitive status cannot be determined without formal assessment. Some <u>medical experts</u> have urged President Biden to <u>undergo such neurological testing</u> and make the results public.

It's also worth remembering that former President Trump is not without a history of his own <u>verbal gaffes</u>.

Ultimately, until actual medical evidence to the contrary becomes available, we must beware of becoming "armchair physicians" and stay focused on policy issues.



This article is republished from <u>The Conversation</u> under a Creative Commons license. Read the <u>original article</u>.

Provided by The Conversation

Citation: Is Joe Biden experiencing cognitive decline? Here's why we shouldn't speculate (2024, July 17) retrieved 17 August 2024 from https://medicalxpress.com/news/2024-07-joe-biden-experiencing-cognitive-decline.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.